

Customer	:	CU-DAR001 Dart Helicopters Services	Drawing Name	:	BAR	
Job Number	:	30655				
Estimate Number	:	10390				
P.O. Number	:	N/A	Part Number	:	D3197041	
This Issue	:	2/5/2007	S.O. No.	:	N/A	
Prsht Rev.	:	NC	Drawing Number	:	D3197 REV B	
First Issue	:	2/5/2007	Project Number	:	N/A	
Previous Run	:	30603	Drawing Revision	:	B	
Written By	:		Material	:	N/A	
Checked & Approved By	:		Due Date	:	2/23/2007	
Comment	:	Est Rev: A New Issue 05-11-08 JLM				
		Est Rev: B As per Rev B 06-03-10 JLM				

Job Number:



1.0	M7075T73R1000	7075-T73 Round Bar 1" OD
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Comment: Qty.: 2.5410 f(s)/Unit Total: 20.3280 f(s)
Material: 7075-T73 (QQ-A-200/11) or (QQ-A-225/9) 1" OD
(M7075T73R1.000)
Identify for D3197-1
Batch: M100286

ML 07/02/23 6

2.0	BAND SAW	BAND SAW
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Comment: BAND SAW
Cut blanks: 29.125" long

ml 07/02/23 6

3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1

1-Face ends to length per dwg D3197

2-Machine D3197-1 as per Folio FA340 and Dwg D3197

3-Deburr

J.F. 07/02/25 (6)

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

J.F. 07/02/25 (6)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 2/5/2007 4:02:47 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BAR

Job Number: 30655

Part Number: D3197041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

LATHE CONV.

CONVENTIONAL LATHE



Comment: CONVENTIONAL LATHE
Chamfer as per Dwg D3197

J.F. 07/02/27 (6)

6.0

QC8

SECOND CHECK



Comment: SECOND CHECK

S.F. 07/21/27 (6)

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1
Chemical Conversion Coat as per QSI 005 4.1

A.N. 07/02/28 (6)

8.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING
Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

FL/M.R. 07/03/01 (6)

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

SAD 02/03/01 (5)

10.0

D26905

Lanyard ass'y



Comment: Qty.: 2.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 D2690-5 Lanyard B30663

(5)

11.0

D32421

Tag



Comment: Qty.: 2.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 D3242-1 TAG B25966

5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 2/5/2007 4:02:47 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BAR

Job Number: 30655

Part Number: D3197041

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

AN960JD10

Washer



Comment: Qty.: 6.0000 Each(s)/Unit Total : 48.0000 Each(s)

Pick:

Qty Part Number

Description Batch

6 AN960JD10

Washer 11100274

(5)

13.0

D34893200

PIP PIN



Comment: Qty.: 2.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D3489-3-200

Pip Pin

19344 (8)

100259 (12)

(5)

(Pto)

14.0

MS21042L3

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 MS21042L3

Nut (or -3)

M103585

(5)

15.0

MS27039124

Screw



Comment: Qty.: 2.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 MS27039-1-24 Screw

100274

(5)

16.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1
Assemble D3197-041 as per Dwg D3197

SAN

07/02/01

(5)

17.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

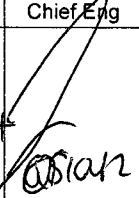



07/03/01

(5)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 07/03/05

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07/03/01	13.0	Part was missing a ring Batch # M19344 one part		replace	SAN 07/03/01	 07/03/01		 07/03/01

NOTE: Date & initial all entries

Date: Monday, 2/5/2007 4:02:47 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BAR

Job Number: 30655

Part Number: D3197041

Job Number:



Seq. #:

Machine Or Operation:

Description :

18.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

PC 7/3/02 (5)

19.0

QC21

FINAL INSPECTION/W/O RELEASE



(5)

Comment: FINAL INSPECTION/W/O RELEASE

DO 7/3/05

Job Completion



U 07103-05

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			



NOTE: Date & initial all entries

66-0321 4
per EON 702

DART



- 1) MATERIAL: 7075-T73 ROUND BAR (QQ-A-200/11 or QQ-A-225/9) ϕ 1.000 O.D.
(REF DART SPEC. M7075T73R1.000)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) FOR TOOLING, IT IS ACCEPTABLE TO HAVE A 0.06 DEEP x 60° CENTER MARK AT EITHER
END OF THE BAR

DESIGN	CP	DRAWN BY	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED		APPROVED		DRAWING NO.	REV. B
				D3197	SHEET 1 OF 1
DATE				TITLE	SCALE
06.01.10				BAR	1:1
A	03.07.01			NEW ISSUE	
B	06.01.10			CHG PIP PIN; ADD D3242-1 TAG	

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DART AEROSPACE LTD		Work Order:
Description:		Part Number:
Inspection Dwg:	Rev:	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X

x

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø 1.000"	± .010"	0.999"	✓			SAME AS W/O 30603 J.F.
.500"	± .010"	.501"	✓			
29.00"	± .030"	29.005"	✓			
11.44"	± .030"	11.444"	✓			
.25"	± .030"	.250"	✓			
Ø .219"	± .005"	Ø .220"	✓			
Ø .191"	± .005"	Ø .192"	✓			
1.000"	± .010"	1.001"	✓			
2.69"	± .030"	2.680"	✓			
1.000"	± .010"	1.000"	✓			
.300"	± .010"	.300"	✓			
Ø 63X45°	± .010"					

Measured by:	J.F.	Audited by:	SA	Prototype Approval:	
Date:	07/02/25	Date:	07.02.25	Date:	

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	